The Indian Poultry Gazette.

Vol. XVIII. (Price Eight Annas.) *August 1930.* *(Registered L-1322) No. 8.*

CONTENTS.

	Page.		Page.
Editorial News ...	... 147	**Value of Green Foods** ...	... 151
The Importance of Shell Texture	... 148	**Buyers, Beware!** ...	... 152
Quality in Utility Stock ...	... 149	**Hints on Moulting** ...	... 154
Food value of Eggs ...	... 150	**Letter to the Editor** ...	... 156
Monthly Competition.		? ? ?	... 160

EDITORIAL NEWS.

For several months past we have given particulars of the Fourth World's Poultry Congress. This was held at the Crystal Palace, London, last month. In the deliberations of the Council, we have no doubt that Mrs. Ansell (Fawkes) put forward the case for India. We, in this country, cannot realize the magnitude of the power of the Association responsible for these Congresses, but, nevertheless, it is up to us, as poultry enthusiasts, to visualise what good work it is doing.

Practically every civilised country in the world is awake to the fact that the keeping of poultry is a National Asset. In India, most people scorn the *Desi* element, and say that it does not pay to keep the pure-breds from other countries. This, as all wi'. agree is but a fallacy.

How much more pleasure do we get from the keeping of these breeds, not only in the better quality of eggs, but in seeing the look of admiration in the poorer class of Indian when our birds are on view. Is it not, therefore, better that we should pass this knowledge on. The present of a spare cockerel or cross bred pullets is such as we can all afford, and, by doing so, we all help to further the cause of "Better Poultry for India."

At this time of the year, practically all of us have a surplus to our requirements for the coming season, therefore, we would ask that this surplus be distributed to those that cannot afford to purchase high class stock.

Our post bag increases daily with "Queries." At long last, we seem to be making headway. Our expert "Buff Rock" has had to put his 'thinking cap' on and has tried to satisfy everybody, but we regret "Buff Rock" is unable to give the questions as well as the answers to the queries submitted to him as space is limited and our ?.?.? page is getting larger, that for the sake of room and to answer more of our readers questions we have had to curtail this. After all, it is only the concern of the individual who writes in most cases, and we therefore hope our readers will excuse our having to economise space.

The monthly Competition has again been won by Mr. Wiggal, we trust that readers will not allow him to continue, but send in more attempts. We believe that a better working knowledge will be gained by this competition, which is open to *all* readers.

THE IMPORTANCE OF SHELL TEXTURE.

How to produce Good Shells on Eggs.

There is no single factor that plays so important a part in the production of high quality eggs as the character of the shell texture. We spend valued time and effort in breeding, housing, sanitation and feeding in order that the hen may produce the highest quality product, and if we neglect to provide her with the proper materials to wrap that quality product up, our efforts may be fruitless. Nature's wisdom has endowed the hen with the ability to enclose her valued product in a double lined, sealed package to protect it and deliver it to mankind in as near its original quality as possible. She is willing to do her part but must have the aid of proper feeding to accomplish her willing desires, says W. A. Atkinson, President of Quality Egg Club, in "Poultry Item," America.

Thin, porous-shelled eggs cause rapid evaporation—eggs that shrink so rapidly that a four day old egg often looks as if it were two weeks or more old under the candle. The shell has a mottled appearance that is very forcibly discriminated against—discriminated against in a manner that makes itself keenly felt in the poultryman's pocket-book. A dozen such eggs will lose two or three ounces per dozen from the time they are packed to the time they arrive on the receiver's floor and appreciably more by the time they reach the consumer. The grading of the package is lowered—a 24 oz. per dozen egg may be only a 22 oz. per dozen egg when it is sold. The quality is lowered and the breakage increased, making a very unsatisfactory package from every point of view, despite what it might have been when originally packed.

"WHAT YOU SET, YOU GET."

What is the cause of poor shell texture? Many reasons have been advanced, ranging from putting the blame on "Biddy" herself to saddling the weatherman with the burden, but never including the poultryman himself. It has been my personal experience that the cause is about 10 per cent. breeding and 90 per cent. feeding. There is no doubt that a certain percentage of chickens seem to lack the inherent ability to produce good shell texture—a condition somewhat analogous to the trait of poor teeth that may run in some of our human families. This may be due to the improper functioning of some of the glands (notably) the ductless ones that we know so little about). At any rate, it is in a measure inherited, but the comparative percentage is small and the remedy obvious. Feed so that the flock as a whole is producing a good shell and do not place the porous ones in the incubator. "What you set you get," applies to this as well as to other factors.

AMOUNT OF SHELL FOOD NEEDED.

A normal flock producing around 50 per cent., in my experience, required 65 lb. of shell producing material per ton of feed in order to produce a good shell, and if production is above this figure, proportionate increase of this amount is required. This can be furnished from various sources orginating in the vegetable, animal or mineral kingdom, but the source of the material determines to a large extent the character of the shell produced. It is surprising to what extent experienced egg men can tell what the quality of the egg should be by handling a few eggs together even before they are candled. There is a type of shell that has a "Dresden China" sound and feel when handled together, and there is another type that has a dull, tough sound and feel It is the latter type that usually denotes the likelihood of high quality and the former the possibility of poor quality. Under the candle both may show a good shell texture, but the structural conditions are different. The "Dresden China" type lend themselves to much more rapid evaporation than the other.

LIVING (ORGANIC) SOURCES OF LIFE.

Dependence to a large extent for the shell producing material on the mineral source will produce the "China" type of shell, and if sufficient material of this source is used in the mash to produce results the palatability of the feed is materially reduced. Nevertheless, they help in hardening the shell and may be used, but not to exceed 20 per cent. of the total amount of shell producing material. The other 80 per cent. should come from an organic source (living organism). The hen seems to be better able

to assimilate and use the calcium and phosphorus from this source than from the mineral or inorganic source. The calcium form the leguminous crops, primarily alfalfa and clover, and the phosphoric compounds of calcium obtained from bone-meal have given me the best results. I am to provide the necessary 65 lbs. in the mash, and what the hen gets from the grit and shell box she can use for the catabolic (breaking down) and metabolic (building up) processes in her body.

A factor that should be borne in mind is that "if a little is good, twice as much is not always better." If too much of the calcium compounds is used (especially from the mineral source) it puts a burden on the hen to eliminate from her body the excess, tending toward a depletion of the secretive fluids of the body. This is especially true in the case of the phosphoric compounds of calcium.

Some of our commercial forms of "mineral compounds" that rely upon animal bone-meal for their basic source of phospharus and calcium are able to give satisfactory results with lesser amounts than of the raw untreated bone-meal, due to the fact that the method of manufacture renders the product in not only a more concentrated but also, what is of more value, in a more assimilable form.

The use of a good grade of cod liver oil will play no small part in the proper production of good shell texture. This is especially true during the seasons of the year when the amount of available sunshine is low. During the summer months its use may be readily dispensed with, as the commensurate benefit derived from its use during this period does not seem to warrant the continuance of its use. Approximately one gallon to one half ton of mash should be used if the oil is of good quality. If it is not of good grade it is better not to use any. Moreover, if the calcium content of the food is not sufficient it is a waste of money to use cod liver oil at all.

The vitamin content of cod liver oil has its greatest function in the aiding of the hen to break down the calcium compounds in the feed and build them up into other calcium compounds in the making of shell and the maintaining of the body requirements. Unless this material is provided for in the proper amounts the use of C. L. O. is of questionable value.

(See on next page).

QUALITY IN UTILITY STOCK.

(By "Poultryman")

It is obvious that there is still a great deal of misconception regarding the Utility Standard and its interpretation. There is evidence of this in the class of some of the exhibits penned, and occasionally in the awards of the judges.

Some poultry-keepers regard the Standard as a guide to picking out the layers irrespective of other considerations, and that, in their opinion, the bird that should win in a Utility Class is the most likely looking layer regardless of conformity to type and other distinctive features of the breed.

The Utility Standard must be taken up conjunction with the breed standards to gain a right understanding of the points mainly in regard to type which distinguishes the breeds. Something more than a "fair specimen" of the breed should be required to win in a Utility class.

The standard must above all things safeguard type, which is the foundation of the breeds. How can we maintain the identity of the breeds if this essential is overlooked or ignored?

Standard-bred poultry should possess all requirements appertaining to the height of perfection from every standpoint. The term "standard-bred" covers the requirements of size, shape, and general conformation of body, in addition to the colour and plumage markings. There is nothing incompatible between true standard quality and high production.

In Uutility judging there are certain specified disqualifications; such as under-weight; indications of impurity of breed; wry tail, and faking and dubbing. The judge should also pass a bird that falls short of a reasonable standard in type, no matter what other good points it may possess.

The object of Utility classes in the shows is to encourage the concentration of effort on the breeding of fowls of better quality. What is desired is a due appreciation of the value of maintaining the purity, type and distinctive characteristics of the money-making breeds.

(See column 2 on next page).

FOOD VALUE OF EGGS.

(By Albert H. Brain.)

There is a very natural reaction at present to the accepted views on the purchase of human food.

From time to time there have been people emphasising the troubles associated with bleached and chemically prepared foods, but on the whole, the public has tended to buy by appearances and under the influence of skilful advertising.

Doubtless many will deny the power of advertising on questions of domestic food, but any firm will prove that sales fall as soon as advertising is curtailed.

The subject of this article is not advertising by any means, but the point to be realised is that people have been in the habit of buying eggs purely on the recommendations on the covering tickets and not with knowledge of the relative values of eggs of various types and ages.

There is a very great difference between a perfectly fresh-laid egg and a badly-kept stale egg.

The former is life food in concentrated form, the latter may be a disease administrator, also in concentrated form.

True, nourishment of the egg was intended for the life food of the chick during incubation, just as milk is Nature's food for the calf. In both cases, however, the food is primarily designed for the building up of flesh and animal constitution and this nutritional value is equally applicable to human beings. The freshly-laid is undoubtedly the finest natural food in existence.

There are really, only two classes of natural foods which, in themselves can completely support animal life. These are (1) eggs, and (2) milks.

Eggs are the natural foods of bird, fish, reptile and insect life, whilst milks are the natural foods of mammals, including man.

Of these two classes of foods, eggs have very distinct advantages.

ABSENCE OF WASTE PRODUCTS.

In the first place, during the development of the chick within the shell, this is a completely enclosed animal system, cut off completely from the outer world, and even unable to get rid of any indigestible and waste products from the body.

In spite of this the chick grows, develops and remains healthy within the shell during incubation, which is proof that the egg, the sole food of the unhatched chick, supplies a complete food for growth

---

(Continued from previous page).

EGGS FOR HATCHING.

There is another factor that will warrant attention. It may be possible to produce too hard and tough a shell for our hatching eggs, so that the inflow of exygen and escape of carbon dioxide gas during incubation period is hindered. The catalytic changes in the shell and the depositing of the calcium in the chick structure may be retarded, making it harder for the chick to break out of the shell. Again, it is but a case of management in which the poultryman himself is the main factor in the success or failure of his business.

(Continued from previous page).

This is possible without subordinating Utility qualities, and in combination with the requisite physique and stamina, will give the greater satisfaction and profit to the owner.

No one will deny nowadays, that the pure-bred fowl is better than the mongrel or nondescript, from the point of view of either profit or pleasure in the keeping of them.

This was one of the first principles laid down in the foundation work of the promoters of the laying competitions, in restricting the tests of pure-bred birds. It is true that there has in the past been some leniency in regard to the application of the rule that the bird accepted must be a "fair specimen" of the breed represented, but there has been a gradual tightening up in this respect, which has resulted in the breeding of better quality.

THE VALUE OF POULTRY GREEN FOODS.

Green food is necessary for the well-being of poultry, because it supplies (a) mineral salts, (b) vitamins, and (c) water. We can feed substitutes, but these are generally more costly, more difficult to feed, and are in a chemical form which is less assimilable than the organic salts in green food. It maintains the appetite and keeps the digestive organs in a workable state and able to utilise fully the astonishingly large quantity of food which is taken into the fowl if the bird is a good layer.

(See on next page).

(Continued from previous page).

and healthy development, leaving no waste products which would cause injury to the tender system of the chick.

Now, in the case of mammals suckling their young on natural milk, the young *do* and *must* get rid of waste products, both in solution, as urine, and in solid as dung. Stoppage of either of these types of waste products would kill the young animals.

Thus milk, although a complete food, does necessitate the excretion of waste products, whilst eggs do not.

Secondly, eggs are free from the risk of contamination, handling and adulteration, so long as they remain in the shell, whereas milk is very liable to contamination and is open to adulteration. Moreover, under normal conditions, eggs keep much better than milks, requiring no adulterants or preservatives to store them indefinitely. The usual methods of storing eggs in shell merely depends on the sealing of the pores of the shell to exclude air.

In fact, on one system, a process of drying utilises the drying of the white of the egg to seal the pores of the inner shell membrane. Milk and milk products are distinctly difficult to keep in good condition, being very liable to fermentation and bacterial putrefaction, but badly kept eggs may be as dangerous as badly kept milk products. For safety, the infertile egg is desirable as human food, having no risk of trouble if left warm for some time.

The ideal way to treat eggs for human consumption is to draw infertile eggs straight away from the nest and take them at once to a cooling room, when the possibilities of chemical change become remote.

EGGS AS FLESH BUILDERS.

Both eggs and milk have a considerable proportion of water in their composition, the edible portion of the former having 73·67 per cent., and the latter 87·75 per cent. of water.

The dry constituents of food are the ones contributing to the actual flesh building capacity of the foods, in so far as these constituents are digestible.

One of the objects of these natural foods is to build up flesh, and it is fairly obvious that the nearer the food is to the composition of flesh, the easier it should be to build up such flesh.

The dried constituents of the egg, the flesh of fowl, and the cow's milk are given for comparison.

	Egg. per cent.	Flesh of Fowl. per cent.	Cow's Milk. per cent.
Fat ...	38·6	38·5	25·0
Protein ...	49·8	49·8	33·0
Minerals ...	3·5	8·6	6·25
Sugars ...	—	—	35·75

Animal flesh is much alike in composition, so that it would appear that the egg closely resembles animal flesh in actual composition. It is also completely digestible and health-giving. In fact, an egg may be considered as real concentrated life.

Although eggs appear watery, they are actually built up of a smaller percentage of water than are we ourselves. There can be no doubt that the egg represents the finest available human food, and its price is very reasonable by comparison with other human foods.

Poultry are wonderfully efficient converters of their own food into digestible human food, for the flesh of the fowl is very digestible and the egg is perfection in food. It is doubtful if any other form of farm livestock can compare in efficiency with fowls.

BUYERS, BEWARE!

(By "Cautious".)

Life would be a very poor business and a very dismal affair if we suspected everyone as untrustworthy. Confidence in our fellows is necessary for the conduct of business. At the same time it is important to take precautions against those who are all the time on the outlook to catch the unwary. This is true in connection with all forms of trade.

Poultry-keepers appear to be specially subject to the machinations of the unscruplous, probably from the fact that they are tempted by offers of better bargains, and many of them are not engaged in business. That has been so throughout the entire history of poultry husbandry, helped by the indisposition of people to take legal action, and a doubt whether the culprits are worth powder and shot.

With, however, the increase of production, and the advent of newcomers into this branch, it is necessary to warn all those who purchase hatching eggs or stock not to buy from those people of whom they know nothing, and are often far distant. Generally the methods employed are that birds are advertised at an extraordinary low price, and stated to be record layers—or something after that style.

No apology is made for the fact that this subject has been dealt with before in the columns of the Gazette, because the beginners who then read, and

(See on next page).

(Continued from previous page).

Lack of green food, especially in a sunless pen, encourages layers' cramp, intensive anæmia and thin-shelled eggs. The paleness of comb and wattles to be seen in a closely confined pen about February is due to this lack. Where one cannot obtain green foods the addition of ground bone, oyster dust, common salt and potassium iodide in proper proportions will add the chief salts chemically. Such a mixture costs about 2*s*. per stone, and it must be very intimately mixed, whereas if one sets aside a part of the garden for the growing of green food this expense and trouble will be diminished. Such plants should be of a variety specially chosen for poultry-feeding, and can be planted close together (from 50 per cent. to 100 per cent.), so as to conserve space. Poultry-keepers have a further advantage in being able to use the droppings as manure, for most greenstuff are heavy feeders.

Of the vitamins, those termed A. B and C are generally recognised, although D and E have been named recently. Fat soluble A is necessary for growth in young stock; water soluble B prevents polyneuritis, and water soluble C prevents scurvy, but it is not so important from the poultry point of view. Heating diminishes the activity of A, affects B slightly, and C is destroyed by drying or exposure. Thus one can see how fresh, live green food maintains its activity in regard to efficiency of vitamins, and why so many other foods lack vitamin content.

Let us compare the value of green foods for vitamin, taking for our purpose 10 as the maximum.

Grass is rich in all three, *i.e.*, 7 of each, but it must be realised that the best grass is short, green and newly-grown, and does not consist of dried seed stems or frozen leaves. The green leaves of the ordinary garden cabbage contain 7 of A, 3 of B, and 10 of C, and under this heading could come savoy, cauliflower and broccoli leaves. Lettuce for chicks has 7 of A, 3 of B and 7 of C, and so has mustard (leaves) and kale. Clover and alfalfa are richest in B of our green foods, as their value is 7 each of A, B and C. Sprouted oats has the same efficiency, but from the mineral point of view it does not improve by allowing it to grow more than one inch in height, and is best fed at this stage.

Cooked cabbage loses all the power of A and C, and has only 3 of vit. B left, but the mineral salts are unimpaired so long as the water in which they are cooked is used to mix the mixture. Beetroot is supposed to contain practically no vitamins and carrots 7 of A, 3 of B and 0 of C. The value of swedes is 10 of C and none of A and B.

Green food must be fed fresh, crisp, unfrosted and unwilted, and then the birds eat it greedily and the maximum value is obtained.

The whole question of feeding is indeed fascinating.

United Provinces Poultry Farm, Lucknow.

Our many clients will share with the Association the pride they have in announcing that at the recent All-India Show, out of eighteen exhibits entered all won awards with the exception of one pullet.

We also carried off the supreme trophy of the Viceroy's Cup with an utility exhibit "Black Australorp Cockerel" who also won four other challenge cups.

Our other wins were in R. I. Reds with a pullet bred from our Prince of Wales's Strain and the best Breeding trio challenge cup fell to our R. I. Reds.

Our Light Sussex won highest honours including challenge cup and both White and Brown eggs from the Farm went up top.

We have some attractive offers in breeding pens to sell next month, the pens that have bred the above good stock.

Chickens and eggs are now on sale also. Send for our full price list.

Apply Secretary,—

8. **U. P. P. A. LUCKNOW.**

HINTS ON MOULTING.

There is no definite season for moulting, which may occur as early as June and as late as November. *It depends upon feeding and other circumstances.* Moulting is a natural process, which must not be *confounded with disease, although if fowls are* reduced in condition through the moult they naturally become susceptitble to disease.

After a long season of production the moult is *a severe strain on a hen which has been reduced in* *condition, and it is therefore necessary that* poultry-keepers should learn to look after their birds when they are moulting. With the general body of laying stock the present time is rather early for moulting, but it requires very little to encourage birds that have been producing eggs over a long season to cease laying and begin dropping their feathers.

From this it is apparent that the moult can be controlled by feeding and management. A light diet will cause early moulting, whereas a generous diet that is fairly rich in protein will help the hens to continue laying through the summer. One naturally expects that the pullets which were hatched early and commenced to lay early last year will be the first to moult; and if these birds are getting rough in condition, a light diet will certainly induce them to drop into moult.

It is a simple matter to induce hens to moult *early, especially in warm weather, and a light diet* with close confinement in a darkened house will soon result in dropping of the feathers. Whether it pays to force early moulting is quite another matter. It depends mainly on their condition, for if they are light and loose in feather they may as well moult at once, whereas well-conditioned birds may be kept in lay.

Fanciers make a practice of forcing birds to moult early in order to get them in good condition for the shows in late summer and autumn. Any birds which one wishes to moult early should be isolated in warm and darkened houses, while *stimulating food should be omitted from their diet,* and the quantity of food should gradually be reduced until the feathers begin to fall.

It is advisable to feed these birds entirely on mash containing a large proportion of bran, and this diet *should be continued till the moult is well* advanced, because the *resumption of generous* feeding might cause a check in the moult. Forced moulting is necessarily an unnatural process, and it requires some care and attention to keep the moult going satisfactorily and, at the same time, to avoid getting the birds in low condition.

It is a good plan to add flowers of sulphur to the mash during the moulting process—about a

(See on next page).

(Continued from previous page).

perhaps profited by the said remarks, are now probably beginners no longer, while a fresh generation has sprung up, as it were, since then, and it is to these that the caution contained in the above heading is addressed.

It is not proposed—because it is practically impossible—to give any definite "recipe" for distinguishing genuine advertisers from the reverse, but the beginner is asked to get fixed in his mind that (1) You can *never get something for nothing (wrong 'uns excepted of course). (2) Safety first is the only* motto when dealing with strangers.

Regarding point 1, and the suppositious advertisement mentioned as a sample, surely anyone thinking for a moment can see that the advertiser is *anxious and willing to lose money over every bird he sells at the price.* Apart from this, why has he not been heard of before? Next, even supposing the possibility of genuineness, it seems incredible that safety first, represented as it is in such cases by the payment of the small fee charged for a deal on the Club Deposit System, should be so frequently a neglected precaution. But it is, and will be so long as there is a supply of "mugs" upon whom the rogues *may batten.*

No one likes being made a mug of. Then make up your mind, dear reader, that you, at any rate, will take no risks in future.

HEALTHIER HOUSING FOR YOUR BIRDS

INSULATE

Egg production can be largely increased by using CELOTEX for lining the walls and roofs of poultry houses.

Once installed, it gives poultry the permanent advantage of a much more uniform temperature with absolute insulation against extreme heat or cold, draughts and damp.

CELOTEX is easy to cut and apply, and weighs only 60 pounds per 100 square feet. It is supplied in boards 3 and 4 feet wide, $\frac{7}{16}$ in. thick, in various lengths from 8 to 14 feet

AND POULTRY WILL PAY

SEE

OUR "IDEAL" POULTRY HOUSE

AT THE

U. P. P. A. FARM :: :: LUCKNOW.

PARTICULARS GLADLY GIVEN BY THE SECRETARY.

CELOTEX

INSULATING LUMBER

"The Board of Health"

SOLE DISTRIBUTORS:

SHAW WALLACE & CO.

CALCUTTA.

12.

LETTER TO THE EDITOR.

SIR,

Referring to the article of Mr. A. O. Foden in the July number of the Indian Poultry Gazette, I cannot agree with his remarks concerning the Etah Mission Poultry Farm. He appears to have entirely missed the mark. Let's get down to facts.

(1). Firstly, he states that he knows he will be unpopular with one gentleman, why, may I ask, I *may be labouring under a misapprehension, but* I understand that the Indian Poultry Gazette is a journal through which its members could state their *views, the Editor not holding himself responsible.* If any member considers the article written, to be unfair comment or incorrect, he has the same priviledge in airing his own views through the said journal. "So why the unpopularity"?

(2). Referring to the manner under which Mr. Slater gets his birds from the United States of America, for arguments sake he gets them free graits. Last February I had the pleasure of visiting the Etah Mission Poultry Show, organised and run by the Etah Mission Poultry Farm, there, mostly in the open, I saw 900 odd birds penned, all Indian owned and I might add 90% of which were owned by the poorer class Indian.

Here I'm not quite sure of facts, but I'm open to *question if incorrect:—Those Indians obtained* the eggs from the Mission Poultry Farm at the moderate price of one anna per egg whereby to *raise the birds I saw exhibited.*

I may be an Amateur, but I've an eye for a good bird when I see him and the lot I saw exhibited at Etah impressed me very favourably and in some cases they were extremely well put down. I bought a trio of Black Minorcas from three different Indians, the progeny of which will be seen at the coming All India Show.

Now we arrive at the main point of my argument:—I consider Mr. Slater to be conferring an immense benefit on the poorer class Indian in the Etah district, firstly, by putting within his reach a bird whose advantages over the village *Murghi* need not be dilated on, also he spends much time and energy instructing them how to keep them profitably.

I will quote one instance that came to my notice whilst at this show—An old Indian had carried a bird under his arm for 30 miles to put in the show, on arrival he found he was too late, the birds had been judged. Slater awarded him a special prize, that, I consider to be encouragement in its undiluted form.

(Continued from previous page).

teaspoonful to a dozen birds; and if wet mash is given this should be mixed with the meal before water is added. As the physical condition of the birds will be reduced as a consequence of the forced moult it will be necessary to watch the birds, for a more generous diet should not be given until the new plumage has begun to grow.

If hens that have ceased laying are shut in a darkened house, and put on a light diet without any stimulating ingredients, they should begin to drop their feathers within a week. A dose of Epsom salts in the drinking water two or three times a week will help to start the moult, but this should not be continued when the feathers are dropping, or it may weaken the birds to a serious extent.

The great thing in forcing an early moult is to get rid of the old feathers before a richer diet is adopted, for in some cases the introduction of a richer diet before the moult is well under weigh will cause the birds to recommence laying. There is no telling when the hens will start laying again after the moult, or whether they will moult again in autumn after laying a batch of eggs. After all, forced moulting is a risky process, and cannot be recommended as a commercial measure.

Much will depend upon the feeding, while individual character accounts for a good deal. Some birds will do well, while others will not justify all the trouble that has been taken with them. It will generally be found that young hens (the pullets of 1929) lend themselves more readily to forced moulting than older birds. Moreover, when the moult is over these young hens are more likely to respond to a generous diet by coming on to lay after a comparatively short period of rest.

"Poultry."

MISSION POULTRY FARM, ETAH, U. P.

SPECIALIZES IN :—

DUAL PURPOSE EXHIBITION AND UTILITY R. I. REDS.
EXHIBITION AND UTILITY MINORCAS.
EXHIBITION AND UTILITY WHITE LEGHORNS.

Our recent Wins.

CALCUTTA POULTRY EXHIBITION, DECEMBER 1929.

5 Challenge Cups, 3 Open Specials, 9 Firsts, 7 Seconds, 3 Thirds, 3 V. H. C. Including BEST BIRD IN THE SHOW, with a R. I. RED PULLET ; I. P. C. Challenge Cup. for the BEST R. I. RED COCKEREL and Galstaun Challenge Cup for the BEST LEGHORN.

ALL-INDIA POULTRY EXHIBITION, LUCKNOW, JANUARY 1930.

5 Challenge Cups, 7 Firsts, 4 Seconds, 2 Thirds, 1 V. H. C., 2 Reserve. Including I. P. C. Challenge Cup for BEST R. I. RED COCKEREL and Galstaun Challenge Cup for BEST LEGHORN.

Eggs for Hatching.

R. I. REDS. EX-UTILITY	**Rs. 30/-** per Dozen.
R. I. REDS UTILITY	**Rs. 18/-** per Dozen.
EXHIBITION MINORCAS (Imported Pen) ...	**Rs. 30/-** per Dozen.
UTILITY MINORCAS	**Rs. 18/-** per Dozen.
EXHIBITION LEGHORNS (Dewar's) ...	**Rs. 24/-** per Dozen.
UTILITY LEGHORNS	**Rs. 18/-** per Dozen.

Packing and despatch free. 15 eggs sent to the Dozen.

BREEDING STOCK FOR SALE.

Cocks, Cockerels, Hens, Pullets, Exhibition White Leghorns. Rs. **15**/-, **20**/-, and **25**/- each.
Utility White Leghorns. Rs. **10**/-, **15**/- and **20**/- each.

Crate and Freight extra at cost.

SATISFACTIONS GUARANTEED.

1. **A. E. SLATER,** ***Manager.***

Then again, there is the Amateur who obtains his Rooster yearly from the Etah Farm to improve his stock, or he can obtain the eggs from the imported stock at a fair rate. Is not the same opportunity given to him to compete in the shows providing he goes the correct way about it? I say yes.

From a sporting point of view, and in the interest of the Fancy, would it be fair or just to eliminate Slater from competing on equal terms in Poultry Shows held under the auspicies of the Indian Poultry Club. My answer is very much in the negative.

As regards the closed cups, my own opinion on the subject is, that there should be no such thing as closed cups, it gives rise to all sorts of funny comments. This is where I consider the Amateur does *not* get a square deal when competing in the open.

My Motto is:—A wide field and no favours, irrespective of caste or creed.

J. EATWELL.

IMPROVEMENT IN CIRCULATION.

We beg to thank those interested readers who have recommended the Gazette to their friends. Every month new names are added to our mailing list, and the amount of correspondence received leads us to believe that this industry is making headway in India.

In a country so large as India, there must be thousands of people who keep poultry, and would welcome our Gazette in many ways. It will be realised that it is practically impossible for your Hon. Editor to get in direct touch with these, but, no doubt, around your district you could make known this publication.

Where poultry is kept, the Gazette should go. Can you help? Send us some names of likely relatives and friends. We will gladly send them a copy free of charge. Don't delay, send in the names now.

OVUM

fortifies the Constitution.

To have healthy birds there must be a strong constitution. To secure this, OVUM can be specially recommended. Its tonic properties are such as to fortify the constitution, so laying a good foundation, enabling birds to withstand wear and tear more successfully.

Results certainly prove that OVUM aids poultry in resisting ills to which they are liable in India.

The use of OVUM also strengthesn the ovaries and enables birds to recover more quickly from the strain of laying an egg—therefore they are the sooner ready to lay again.

YOUNG CHICKS

All young birds need care and attention, without which failure is sure to follow. Keep your chicks strong, healthy, growing and thriving by sprinkling a little OVUM in with the soft food. It is astonishing how rapidly young birds so fed will develop and early become a source of profit and pleasure. All poultry keepers should use OVUM when rearing young birds.

Briefly the use of OVUM for young birds assures healthy poultry, sturdy growth and rapid development.

No fear need be entertained of using OVUM. It is perfectly harmless and can be used practically from the start.

A sprinkling of OVUM in the proportion of a teaspoonful for 30 chicks will lay a firm foundation on which growth, health and development will follow naturally.

JOSEPH THORLEY, Ltd.,
King's Cross, London, N. 1.

Indian Agent :—A. O. FODEN, Narayangunge, East Bengal.

Descriptive Literature on Application.

3.

The Indian Poultry Club and Gazette Year Book.

You cannot afford to be without a copy of this valuable book.

Only a few copies left, order now.

WHAT IT CONTAINS.

The Advantages of Poultry Farming, Housing of Poultry, Poultry Feeding, Management for Egg Production, Cross-bred Poultry for India, The Backyarder, Wanted—New Adherents to the Fancy, Does Poultry Pay in India, The Asil, Australorps, Black Minorca, The Romance of the Red World, The 1929 Season in England and all matter pertaining to]

The Indian Poultry Club.

Price :—Rs. 1/8/- (members I. P. C.)
" 2/- non-members.

Apply :—Editor, Indian Poultry Gazette.

GRIT

POULTRY SHELL GRIT.

Your poultry cannot thrive without grit; it is essential to them as your teeth are to you. Shell grit assists in the process of grinding the corn in the fowl's gizzard, and therefore assists in the assimilation of the food. Our grit also contains all the lime that is necessary for the fowls, and, prevents soft shelled eggs. Its price brings it within the reach of all. The grit is ready crushed, in three grades, *i.e.*, Coarse, Medium and fine, and is supplied in 1 maund, ½ maund and ¼ maund bags, at Rs. 4, Rs. 5 and Rs. 6 per maund, F. O. R. Mehsi, B. & N. W. Ry. When ordering state whether to be sent by goods or passenger train.

Apply to:

THE NORTH INDIA POULTRY GRIT WORKS,

Champaran District. Mehsi P. O., BEHAR.

1.

TENNYSON FAWKES,

ROYAL STOCK FARM,

LEONARD STANLEY, GLOUCESTERSHIRE. ENGLAND.

Patronized by Royalty, including Indian Princes and Home, Colonial and Foreign Governments, Established over 30 years. One of the most successful Breeders, Exhibitors, and Exporters of Exhibition and Utility Poultry. Winner of over 8,000 prizes and have supplied winners at all important shows in the World. Poultry and Pigeons of all varieties exported entirely at my own risk to India or any other part of the World. Prices strictly reasonable and inclusive, prompt and personal attention given to all orders and complete satisfaction guaranteed.

Correspondence in any language.

Illustrated catalogue mailed free.

12.

The Celtic Incubator and rearer, 20 eggs size Rs. 25 30 eggs Rs. 30. 45 eggs Rs. 35 Complete with best English Thermometer. Capsule and printed instructions Profitable Poultry Farming in India Booklet Re. 1. "Eggon" one packet makes twelve fowls lay continuously six months Rs. 2. "Preserveg" preserves 50 eggs ans. 6. Tick Proof Perch Brackets Rs. 2-8 pair Egg testing lamps Rs. 3. Coloured celluloid rings fowl size ans. 4. Numbered rings ans. 8. Chick rings ans. 4 per dozen. Safety egg boxes ans. 12. Automatic fountains chick Rs. 1-8. Fowl size Rs. 2. Chick troughs Rs. 1-8. Best British made Incubator Capsules Rs. 5. Thermometer Rs. 5. Flint and limestone grit chick size fowl size 7 lbs. Rs. 1-4. Chick rearing meal 5 lbs. Rs. 2. Poultry laying meal 7 lbs. Rs. 2. Poultry Remedies D. R. Cholera and Diarrhoea cure D. R. chicken Pox cure D. R. Vim Tonic pills. D. R. roup cure "Ticklo" kills ticks, all Rs. 2 each. Full detailed illustrated list free. ROSS I. P. G. Poultry Appliances.

IGATPURI G. I. P.

12.

? ? ?

Questions under this heading are answered free of charge on this page.

Letters should be addressed—BUFF ROCK, C/o. The Hon. Editor, I. P. GAZETTE and marked "Query".

Where readers desire an individual reply they should enclose a stamped addressed envelope and a fee of As. -/8/- is charged.

Mr. B. B. N. *Bombay.*—I do not agree with your grain formula and advise you to give a mixture of—2 parts wheat, 1 part small gram, 1 part curshed oats, 1 part Bajara, ½ part cracked maize, 1 oz., per bird as at present. Your are running a grave risk in soaking the grain as it is very likely to give cronic bowel trouble. It should be fed in its natural state as received from your corn merchant. Your mash formula is far too concentrated two-thirds of the whole being fish meal. I advise the following, 2 parts fish meal, 2 parts bone meal, 2 parts biscuit meal, 6 parts bran, 1 oz. salt to 3 lbs. mash, and the addition of a good tonic spice such as Ovum or Karswood as directed by the makers. The mash should be open to the birds for 2 hours A.M., and 2 hours P.M. I have no doubt under the present system your birds are very fat and not laying too regular.

Mr. M. *Singal Shops, Alambagh.*—I am afraid you will not make your food bill much cheaper than at present unless you buy your ingredients in large quantities wholesale. Your grain feed need only consist of wheat, oats and cracked maize which if you bought say 2-3 maunds at a time would perhaps be cheaper. Your mash is a sensible one but you can cut out either the ½ part of gram or maize meal whichever is the dearer and you will get the same results. You might cut out 1 part ata. I think if you bought biscuit meal wholesale it would be cheaper than ata.

Mrs. P. *Calcutta.*—You have apparently forced your birds and they are in lay too early. The pullets referred to should commence to lay about the end of July and they should not lay an egg of less that 1½ ozs. at the start and once in their stride from 2 to 2¼ would be the average. These birds will be between seasons and no good for the December shows.

Mr. T. *Sikigram.*—The male referred to should be ready for mating to 6-7 second year females by the end of September. The British standard is 5 to 6 points to the comb of this breed.

Mr. H. *Madarkata.*—If you have made sure that you have got the right bird that is responsible for the egg eating then my advice is kill her before you find the whole of your flock get the habit for if you have not got patent nests whereby as soon as an egg is laid it rolls out of sight your life is going to be a misery rushing about as soon as you hear a hen cackle.

Mr. D. *Topra.*—Your birds should have commenced to lay before this and I am inclined to think the reason is due to a too lean mash. I suggest you alter your formula and give the same formula as I have suggested to Mr. B. B. N. Boiled rice will not harm your layers if given to them in moderation and you will find they will be very keen on it and soon clear the hopper.

Mr. S. *Tezpur.*—I have examined the plan and though I agree with it in the main there is one item I must refer to and that is that I have had quite a few queries regarding bowel complaints from other poultry keepers on tea gardens and I suggest that you plan your runs on soil that has not had tea bushes on it or tea bush measures, etc. for at least 2 years or you will I think find a lot of bowel looseness and drooping in the flock.

Mr. F. *Narayangunge.*—The only suggestion I can make in the case you refer to is that you might add ammoniated tincture of quinine to the water, 1 teaspoon to 1 pint. I know where you get your foods from so don't venture to discuss the mash formula.

Mr. C. *Calcutta.*—The I. R. to Desi duck cross will produce a hardy bird but it will not be anything remarkable from a laying paint of view and its weight would range from 3½ to 5 lb. I should think. Why not find someone that keeps the Aylesbury breed and try that cross, it should make a fair dual purpose cross in this climate.

Mrs. W. *Tilai Mission.*—The number of birds you would want to carry out your scheme would be from 300 to 400. From your situation I should be inclined to think you would not make a large profit from the undertaking as transport would be heavy. If you have your own carriage arrangements I should think it might be worth while. Will you give me more details regarding nature of soil, rainfall, etc., and I will go into it more fully.

THE BEST AND RELIABLE WAY OF

SHIPPING POULTRY AND LIVESTOCK

IS THROUGH

NEALE & WILKINSON

LIMITED.

16, Camomile Street, LONDON, E. C. 3.

Own branches at Port Elizabeth, Johannesburg, Birmingham, Bradford, Manchester, Hull, and all over the world.

Rates and full particulars required for export on application.

- Mrs. Lamberts Poultry pills for all Ills -

Obtainable from :

Mrs. TROWER, RESIDENCY ROAD, JODHPUR,

Re. **1**/- *per tin of* **36**, *postage extra.*

4 *tins and above postage paid.*

A Boon to all Poultry lovers. Protect your Birds against all ills. Fortify against the Ranikhet ailment by administering a pill every morning to your birds in any affected area.

Once tried always appreciated.

NUMEROUS UNSOLICITED TESTIMONIALS.

Keep a box always by you as a guarantee against disease.

BATEMAN'S POULTRY FARM

SIMLA. S. W.

Specialists in the breeding of Dual purpose White & Black Leghorns and Black Minorcas.

Only the very best specimens mated up for breeding.

Eggs for hatching Rs. **15/-** per dozen.

Stock available as the season advances at reasonable prices.

QUALITY IS OUR MOTTO.

Apply ;— **H. WIGGAL,** *Manager.*

- SITTINGS -

FROM IMPORTED STOCK.

R. I. REDS FROM SCOTT, ENGLAND.

WHITE LEGHORNS & AUSTRALORPS

- FROM -

GOVERNMENT POULTRY FARM,

AUSTRALIA.

Rs. 15/- for 15 Eggs.

Some good Cockerels Rs. 12/- each.

SUSSEX GROUND OATS. 56 lb., Rs. 10/-

BOTANICAL GARDENS P. O.

3. CALCUTTA.

THE

Feathered World

ANNUAL

1930.

A few of these books have been received for sale.

Rs. 2/8 each.

POST FREE or V. P. P.

APPLY to:—

The EDITOR,

Indian Poultry Gazette.

SOUTH INDIAN POULTRY ASSOCIATION.

Yearly subscription Rs. 3. Two poultry shows per annum. Strong working Committee. Expert advice given, post mortem examinations undertaken at nominal charge, members only. Further particulars from Hony. Secy., S.I.P.A., Aruvankadu, Nilgiris.

Exc.

ROBERT'S STAR PILLS.

Nos. 1 and 2.

No. 1 Cures Cholera and green Diarrhoea.

No. 2 Cures Tick Fever and contains directions how to get rid of ticks.

Full instructions with each box. 48 Pills in a box, Re. 1. When ordering write name and address distinctly.

Pills for Turkey chicks during their infancy to pull them through their infant ailments.

Apply A. G. Roberts,

3-B, Museum Road, Bangalore.

2.

"ANTIFECTOL"

WOOD PRESERVATIVE

is applied with an ordinary paint brush. It permeates the wood work preventing and arresting dry rot, fungus and decay. It is an absolute preservative against White ants, and other destructive insects. It possesses strong antiseptic and disinfectant properties. All woodwork, exterior or interior, should be treated with "**ANTIFECTOL.**"

"**ANTIFECTOL**" is manufactured in Brown, Red and Green. A gallon covers about 800 sq. ft. one coat.

PRICES F. O. R. CALCUTTA.

	Rs.	a.	p.			Rs.	a.	P.	
Brown 5 gall. drums ...	2	12	0	per gall.	Red & Green 5 gall. drums	3	8	0	per gall.
,, 1 gall. tin ...	3	8	0	,,	,, 1 gall. tin	4	8	0	,,

COPY OF TEST CERTIFICATE SENT ON REQUEST.

ELLERMAN'S ARRACAN RICE AND TRADING COMPANY, LTD.

8 **Telegrams "ARRACAN" :: CALCUTTA. :: Post Box 28.**

The Indian Veterinary Journal.

"The Indian Veterinary Journal." Published quarterly. Subscription Rs. 4/- for the profession and Rs. 8/- for others and foreign. It is the only English Veterinary Journal of its kind in India devoted to Veterinary Medicine, Surgery, and kindred subjects. It contains also the cream of current literature, and is valuable alike to Veterinarians and Agriculturists. It circulates all over the world, and is the best medium for advertisement. All communications should be addressed to the Editor,

Mr. P. SRINIVASA RAO,
G.M.V.C.
28, Wallaja Road, Mount Road,
Madras, South India.

Exc.

IMPORTERS OF POULTRY

from the British Isles cannot do better than instruct their Suppliers to ship through :—

VAN OPPEN & Co., Ltd.

(Established 1879, 50 years' experience)

the recognized Experts in the shipment of Livestock.

Van Oppen's are specialists in this branch of shipping. They cover insurance (when so instructed), supply suitable travelling coops, arrange for feeding, watering and the general well-being of stock whilst in transit. Refer your Suppliers for advice and information to :—

VAN OPPEN & Co., Ltd.

Head Office :—90/91, **Bartholomew Close, LONDON, E. C. 1.**

Branch Offices :—Belfast, Birmingham, Bradford, Bristol, Dover, Hull, Leicester, Liverpool, Manchester.

FRANCE :—Société de Transports Van Oppen Ltd., Paris, Boulogne-Sur-Mer, Dieppe and Le Havre.

HOLLAND :—Van Oppen & Co. (Holland), Ltd., Amsterdam, Rotterdam and Roosendaal.

U. S. A. :—Van Oppen & Co., (Inc.)
44, Whitehall Street, New York.

12

Poultry Farming in the East

By Mrs. A. K. FAWKES.

Poultry Expert to the United Provinces Govt.

THE ONLY REALLY

Modern Poultry Book for India.

Written in simple language, it is a practical aid to all poultry keepers, and none should be without it.

The Third Edition of this popular handbook is now ready. It has been completely revised and brought up-to-date and much improved. It contains twenty-two chapters on the management of poultry, including selection of breeds, breeding, housing, feeding, incubation chicken rearing, hygiene, capons, diseases and their treatment, parasites, ticks and tick fever, glossary of poultry terms, general hints, ducks, geese, turkeys, bantams, etc.

SIXTEEN FULL-PAGE COLOURED PLATES.

Numerous pictures & descriptive illustrations.

Price Rs. 4-8 only. By V.P. Post Rs. 5.

Obtainable from . .

Fawkes Appliance Department,

U. P. P. A., :: :: :: LUCKNOW.

Exc.

IMPORTED BIRDS.

LIGHT SUSSEX. Settings from Winner Harper Admas Trials. 1st Prize England. Rs. **20/-** per dozen.

White ORPINGTONS. 1st Prize. From Rs. **30/-** a Trio. Settings Rs. **16/-** per doz.

Mrs. M. Ward.
RED GABLES.
12 Shillong, Assam.

JERSEY BLACK GIANTS.

Eggs from acclimated imported prize birds, excellent layers of large brown eggs.

Rs. **30/-** *per dozen.*

Pullets and Cockerels available.

Standard weights.

Cock 12 to 13 lbs. approx.
Hen 10 lbs. approx.

Mrs. FIRTH.
Ajmer, Rajputana.
11

BOOKS FOR FANCIERS.

	Rs	As.
Inheritance of Fecundity in Fowls ...	4	6
The Sussex Fowl	1	8
The Wyndotte	1	8
The Modern Minorca	1	8
Incubation (Natural and Artificial) ...	1	8
The Racing Homer	1	8
Pigeon Lofts and Fittings ...	0	8
Moulting, Separating stock, Showing, etc., (Pigeons)	0	8
Breeding Poultry for Exhibition ...	0	8

Postage Free or V. P. P.

FROM THE EDITOR
INDIAN POULTRY GAZETTE.

White Leghorn Cockerels.

Bred from my well-known strain.

From Rs. 5/- each at 3 months old.

A good opportunity to introduce fresh blood into your pens for next season's mating.

Mrs. O. B. LACEY,
KANCHRAPARA,
Eastern Bengal Railway.
5.

Pedigree Utility Leghorns.

A few young Cockerels from my imported Leghorns for sale.

READY NOW.

Sire winner at Calcutta Show this year.

Selected Rs. **10/-** each.
Seconds Rs. 8/- „
f.o.r. Calcutta.

A. O. FODEN,
NARAYANGUNJ,
E. BENGAL.
10

VISVA-BHARATI.

Institute of Rural Reconstruction.
POULTRY FARM.

THE BEST IN BENGAL.

Trains apprentices in scientific Poultry keeping. Awards from the 1927 World's Poultry Congress, Ottawa, Canada, and several Prizes at the All India Poultry Shows.

Specialities:—
Rhode Island Reds, W. Leghorns and Chittagongs.

For particulars apply to:—
Director, Sriniketan, P. O. Surul.
9 **BOLPUR**

IMPORTED PENS.
High Grade Utility Rhode Island Reds

Won Fund Challenge Cup for Best R. I. R. bred inIndia
CALCUTTA SHOW 1929.
Setting of 13 Eggs Rs. **22/-**

BLACK BARNEVELDERS

Won Special Prize Best Imported Pen
ALL INDIA 1928.
Setting of seven eggs Rs. **13/-**

Packing and Postage Free

TERMS CASH WITH ORDER

Mrs. WYNDHAM,
LONGVIEW, PANKHABARI,
5 DARJEELING DISTRICT.

THE
Agarpara Estates Poultry Farm
AGARPARA E. B. Ry
(9, MILES OFF CALCUTTA.)

White Leghorns. } Tennyson Fawkes Strain.
Black Minorcas. }
Rhode Island Reds. C. J Lumsden Strain.

CHITTAGONG RABBITS.

Chickens & Settings at moderate rates.

New Laid eggs supplied daily in Calcutta.

FATTENED FOWLS ON ORDER.
Write to Manager.
4

A. C. Bullmore. Arthurston Poultry Farm. Mount Road, Madras.

Breeders of Highest Pedigree Utility White Leghorns, Cams. Barrons, Pad'mans Strains. *Australorps* Judsons, Marville. Christies Strains.

Rhode Island Reds. Golden, Dr. Crowleys Bouchers, also English Exhibition Strain Eggs:—From General Pen White Leghorns only Rs. 7 per dozen. **Special Pens Rs. 15.** Extra Special Pens Rs. 20, Super Special Pens Rs. 25 dozen. Write for New Lists.
11

IMPORTED PENS.

WHITE LEGHORNS—300 egg Tancred strain.

RHODE ISLAND REDS—Iowa State College utility strain.

TURKEYS—First class Indian bred birds.

All laying stock is pedigreed and trapnested.

Eggs Rs. 12/- per dozen, baby chicks, young stock at reasonable prices.

MISSION POULTRY FARM,
Katpadi, South India.
10

GEORGE HOWARD,

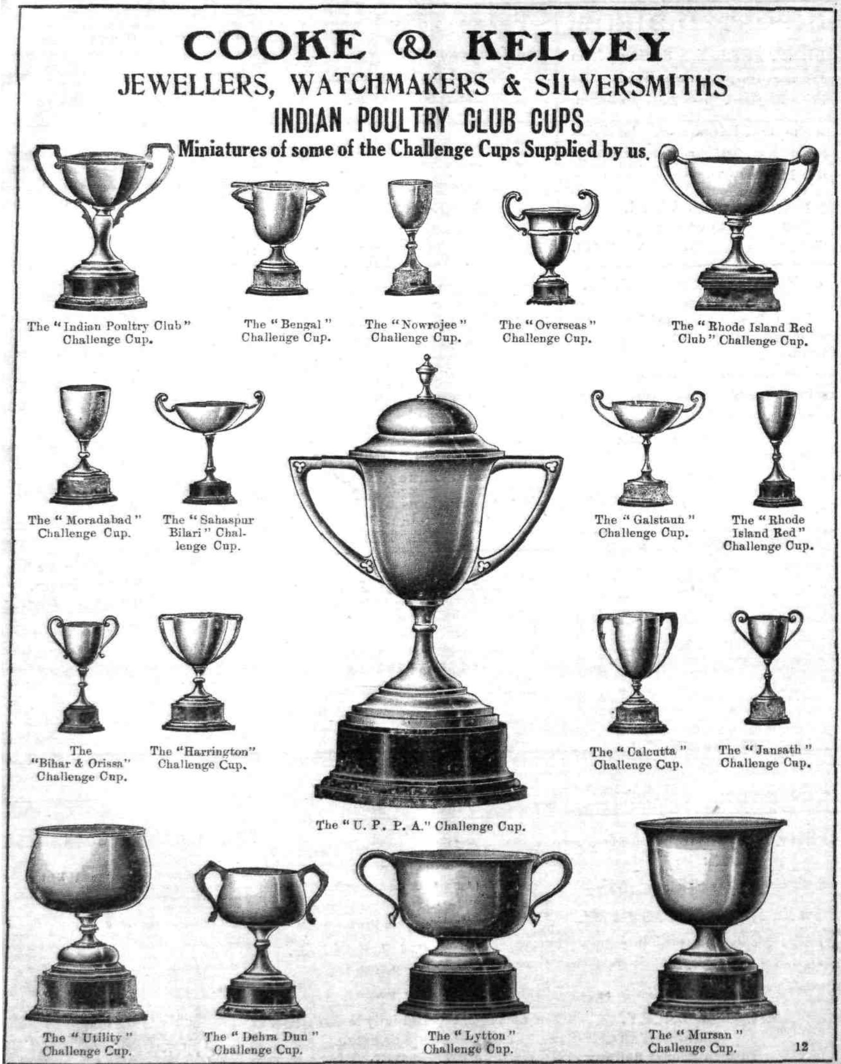
Sperrin Poultry Farm,
Langley, HITCHIN, Herts, England.

Breeder, exhibitor, Exporter of pedigree utility and exhibition poultry. Exports at our own risks and inclusive prices for live delivery Indian ports. Prices from £. 2 per bird.

Absolute satisfaction guaranteed, See further Breeder's Card. See also larger displayed advertisement in Gazette Year Book. Further announcements will appear periodically in this Gazette.
2

UNIQUE EXPORT GUARANTEE.

As your late Secretary and Editor and exporter since leaving India our reputation for square dealing is well known. But in future will export utility poultry on approval i. e. if not approved on arrival, send to Calcutta, Rangoon or All India Show for auction and if purchase price not realised we will refund difference. George Howard.
2



When answering Advertisements please mention The INDIAN POULTRY GAZETTE.